Codename Blue

An Ongoing Study of MMORPG Players

By Nicholas Yee www.nickyee.com

Contact and Attribution

All questions or comments should be directed to Nick Yee (contact@nickyee.com).

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"Codename Blue: An Ongoing Study of MMORPG Players"

by Nicholas Yee, April 2002

http://www.nickyee.com/codeblue/home.html

Introduction

I'd like to thank everyone who has participated in this ongoing study. Your participation is much appreciated.

Codename Blue is an attempt to take what has been learned from the Norrathian Scrolls and collect data from games other than EverQuest to see how general or specific the findings are. This project tries to understand MMORPG players in a broader context, as well as drill deeper into areas that have been explored before. This study is ongoing, and the focus will change every phase. About every month, new questionnaires will be made available and publicized at popular MMORPG portals. Some of the data presented ties in with the 5 factors discussed in Facets (www.nickyee.com/facets/home.html), so read Facets if you want to understand those portions of this presentation.

Some data in this section is very time-sensitive (such as satisfaction with game, or likelihood of trying out a new game) and may change dramatically over time, so bear this in mind when reading this section. The data for this section was collected around 3/25/02.

In general, I am much less interested in overall statistical distributions (such as exact gender ratio) because these statistics are too easily skewed by a biased sampling, and in fact are harder

to pin down. I am much more interested in how subsets of the population differ from each other (such as showing that female players are older than male players), and these second order statistics are less prone to overall sampling bias than the first order statistics.

Demographics

Gender Ratio

There is a significantly higher proportion of female players in EQ when compared with DAOC (p<.001). Although there is just a 5% difference, that is almost a 100% increase of female players.

Gender Ratio					
Male Female N					
EQ	88.3%	11.7%	2684		
UO	89.8%	10.2%	364		
DAOC	93.6%	6.4%	943		

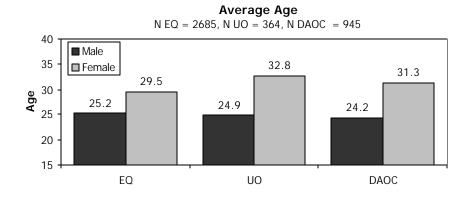
It was reported in the Norrathian Scrolls that about 16% of EQ players were female. Looking over the data from different phases, the number drifts between 12-16%.

Age

The average age of players from the 3 games was between 25-26. DAOC players were slightly younger than players from EQ and UO (p=.003 and p=0.9 respectively).

Average Age							
	Male Female Total						
EQ	25.2	29.5	25.7	2684			
UO	24.9	32.9	25.8	364			
DAOC	24.2	31.3	24.6	943			

Female players are significantly older than male players across all 3 games (p<.001 for all 3).



For EQ players, age correlates negatively with the Grief factor (r=-.30), and the Achievement factor (r=-.20). For UO players, age correlates negatively with the Grief factor (r=-.43). And for DAOC players, age correlates negatively with the Grief factor (r=-.37) and the Achievement factor (r=-.26).

Hours of Play per Week

UO players play significantly fewer hours per week than EQ and DAOC players (p<.001 for both). Age does not correlate significantly with hours played per week.

Average Hours of Play per Week				
EQ	21.9			
UO	18.8			
DAOC	22.4			

For EQ players, hours played per week correlates positively with the Relationship factor (r=.27). For UO players, hours played per week correlates positively with the Achievement factor (r=.28). For DAOC players, hours played per week did not correlate with any of the 5 factors more than r=.15.

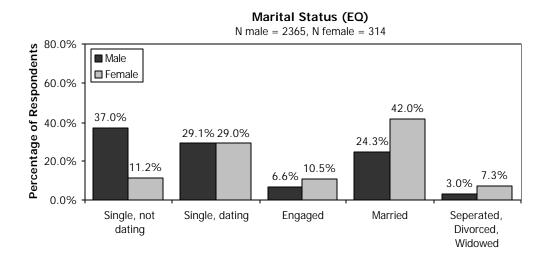
Number of Accounts

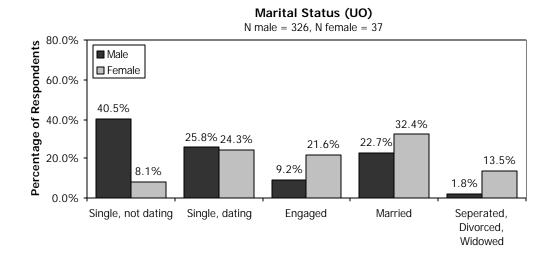
Out of about every 3 UO players, 1 has 2 accounts. Out of about every 4 EQ players, 1 has 2 accounts, Out of about every 10 DAOC players, 1 has 2 accounts. All 3 are significantly different from each other at p<.001.

Average Number of Accounts					
EQ 1.26					
UO	1.56				
DAOC	1.10				

Marital Status

The marital status of players across all 3 games is fairly similar. Male players are significantly more likely to not have a romantic partner in real life than female players (p<.001).



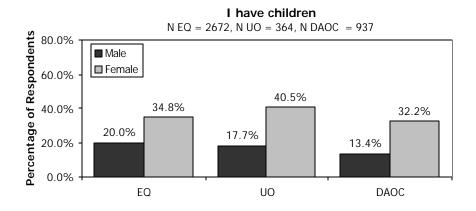


Marital Status (DAOC) N male = 881, N female = 59 80.0% Percentage of Respondents Male ■ Female 60.0% 39.0% 38.6% 40.0% 29.4% 20.3% 19.5% 17.0% 15.3% 20.0% 11.2% 8.5% 1.3% 0.0% Single, not dating Single, dating Engaged Married Seperated, Divorced,

Widowed

Do you have children?

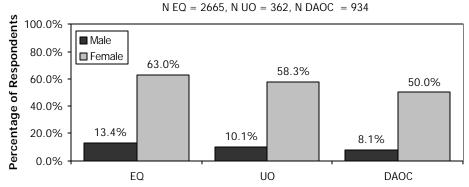
About 20% of players across the 3 games have children. Female players are significantly more likely to have children than male players (p<.001).



Do you play the game with a romantic partner?

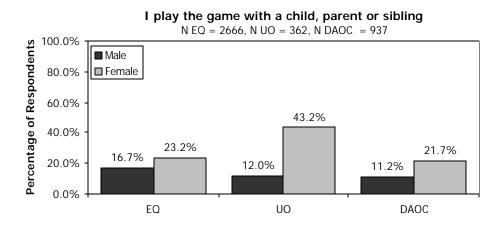
About 17% of players across the 3 games play the game with a romantic partner. About half to 2/3 of female players are playing the game with a romantic partner. Since there are so much fewer female players than male players, the percentage of female players who play with a romantic partner must be higher than that for male players (unless most male players are homosexual, which is probably not the case). The point is that when comparing male with female players, it is important to realize that most female players have a different playing experience than male players because they play the game with a romantic partner.

I play the game with a romantic partner



Do you play with your parent, child, sibling?

About 16% of players across the 3 games play the game with a parent, child or sibling. Female players are significantly more likely than male players to play the game with a parent, child or sibling (p<.001 for all 3). The female UO player percentage is probably inflated due to the low response rate I received from female UO players.

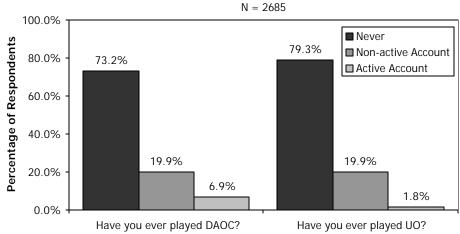


Satisfaction and Upcoming Games

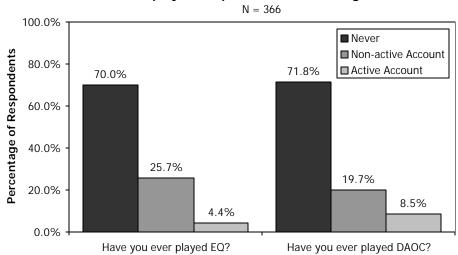
EQ and UO players' experiences with the other 2 games

Most EQ players have never played the other 2 games. 61% of EQ players have never played UO or DAOC. We see the same trend for UO players. 56% of UO players have never played EQ or DAOC.

EQ players' experience with other games



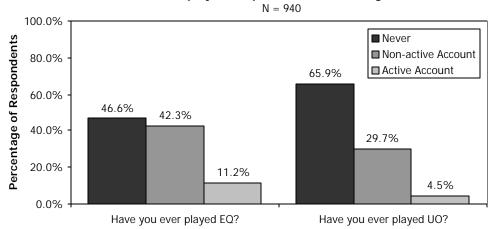
UO players' experience with other games



DAOC players' experiences with the other 2 games

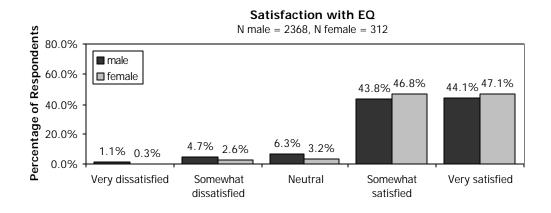
Most DAOC players have played either EQ or UO. About 31% of DAOC players have played neither.

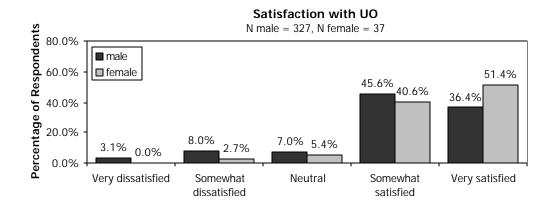


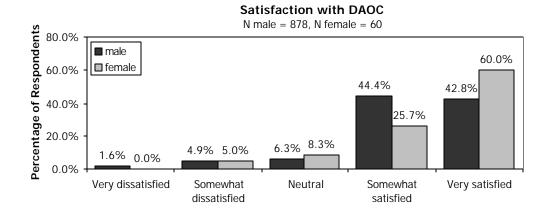


Satisfaction

When asked how satisfied they were with their respective games, respondents gave fairly similar answers across the 3 games. In particular, female players from UO and DAOC were significantly more satisfied than male players from those 2 games (p<.001 for both).

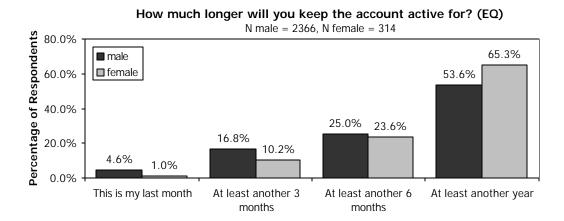


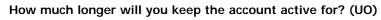


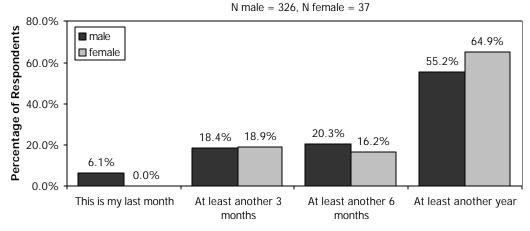


How long will you keep your account active for?

Although it appeared that gamers from all 3 games were equally satisfied with their respective game, differences emerged when asked how long they would keep their accounts active for. In particular, it was found that DAOC players would keep their accounts active for significantly less time when compared with EQ or UO players (p<.001 for both).

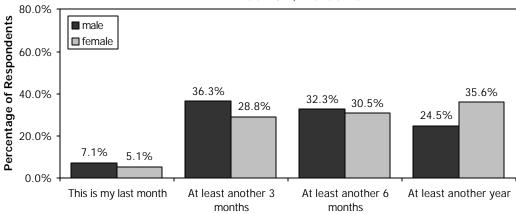






How much longer will you keep the account active for? (DAOC)

N male = 879, N female = 59



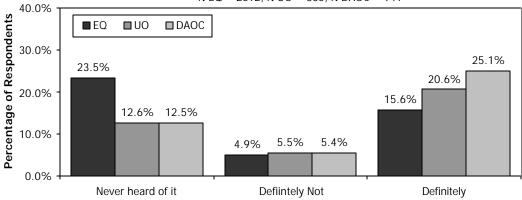
Will you play NeverWinter Nights when it comes out?

The general trend in the following graphs appears that EQ players are generally less aware of upcoming games when compared with DAOC and UO players.

Will you play NeverWinter Nights when it comes out?						
	EQ	UO	DAOC			
Definitely	15.6%	20.6%	25.1%			
Probably	13.3%	13.4%	16.6%			
Maybe	20.3%	24.1%	20.2%			
Probably Not	22.4%	23.8%	20.2%			
Definitely Not	4.9%	5.5%	5.4%			
Never heard of it	23.5%	12.6%	12.5%			

Will you play NeverWinter Nights when it comes out?

N EQ = 2692, N UO = 365, N DAOC = 941

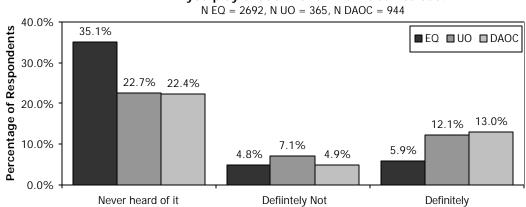


Will you play ShadowBane when it comes out?

More people had never heard of ShadowBane when compared with the other games in this section.

Will you play ShadowBane when it comes out?						
	EQ	UO	DAOC			
Definitely	5.9%	12.1%	13.0%			
Probably	10.1%	11.8%	15.9%			
Maybe	19.3%	20.8%	23.5%			
Probably Not	24.9%	25.5%	20.3%			
Definitely Not	4.8%	7.1%	4.9%			
Never heard of it	35.1%	22.7%	22.4%			

Will you play ShadowBane when it comes out?



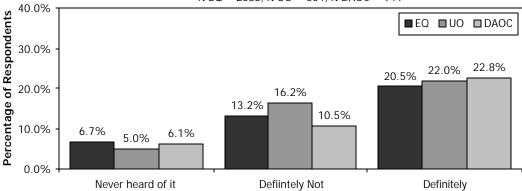
Will you play Star Wars Galaxies when it comes out?

Most players seemed to know about and were eager to try out Star Wars Galaxies.

Will you play Star Wars Galaxies when it comes out?						
	EQ					
Definitely	20.5%	22.0%	22.8%			
Probably	14.8%	17.0%	17.0%			
Maybe	20.5%	17.6%	22.1%			
Probably Not	24.4%	22.3%	21.5%			
Definitely Not	13.2%	16.2%	10.5%			
Never heard of it	6.7%	5.0%	6.1%			

Will you play Star Wars Galaxies when it comes out?

N EQ = 2688, N UO = 364, N DAOC = 944



Will you play Sims Online when it comes out?

0.0%

Never heard of it

While most players had heard of Sims Online, most players were pretty sure they won't be playing this game when it comes out.

Will you play Sims Online when it comes out?							
	EQ UO DAG						
Definitely	3.2%	3.9%	2.5%				
Probably	5.9%	6.0%	4.8%				
Maybe	13.4%	11.5%	10.8%				
Probably Not	34.9%	30.5%	29.1%				
Definitely Not	33.4%	42.6%	47.0%				
Never heard of it	9.2%	5.5%	5.7%				

Will you play Sims Online when it comes out? N male = 2365, N female = 314

80.0% Percentage of Respondents ■ EQ **■** UO ■ DAOC 60.0% 47.0% 42.6% 40.0% 33.4% 20.0% 9.2% 5.5% 5.7% 3.9% 3.2% 2.5%

Defiintely Not

Definitely

Addiction

An attempt was made to come up with a scale that measured the severity of addiction to the game. The point was not to use it as a diagnostic tool, but rather, a way to see how scoring high on this scale might influence other in-game behaviors, or how the scale correlated with general demographics. The following statements were used, and respondents were asked to indicate how accurately the statement described them.

- I worry that my friends will level faster than me.
- I continue to play the game even when I am upset or frustrated with it and not really enjoying it.
- I feel better about myself when I am playing the game.
- I am going through problems or difficulties in real life, and playing the game allows me to temporarily avoid them.
- My playing habits have caused me academic, legal, health, financial, or relationship problems.
- Playing the game makes me feel guilty.
- Nothing gives me as much satisfaction as playing the game.
- I become anxious, irritable or angry if I am unable to play.
- When the servers go down unexpectedly, I feel like I don't know what else to do.

All the above statements inter-correlate to a high degree. A summated scale was then used to continue with the analysis.

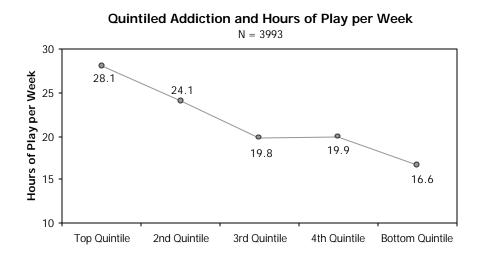
It was found that UO players scored lower on this scale than EQ and DAOC players (p<.001 and p=.02 respectively).

EQ and DAOC male players scored significantly lower on this scale than female players (p=.003 and p=.03 respectively). UO male and female players did not score significantly differently from each other.

The scale correlated negatively with age across all 3 games: -.20 for EQ, -.25 for UO, and -.20 for DAOC. The effect is more dramatic when plotted against quintiles of the addiction scale.

Quintiled Addiction and Age N = 399330 28 27.4 26 26.7 26.1 24.5 24 22 22.5 20 Top Quintile 2nd Quintile 3rd Quintile 4th Quintile **Bottom Quintile**

The scale correlated positively with number of hours played each week: .30 for EQ, .32 for UO, .33 for DAOC. Between the top and bottom quartile is almost a 12 hour difference in average game play per week.

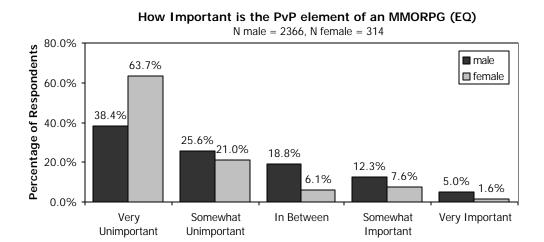


The addiction scale correlates positively with the Achievement, Grief and Relationship factors (.32, .26, and .26 respectively).

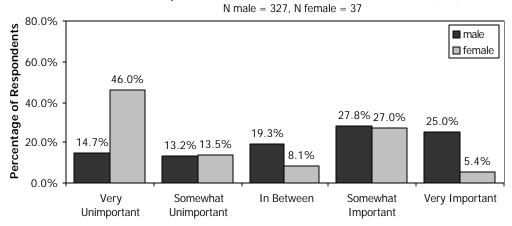
Miscellaneous

How important is the PvP element?

Most EQ players find the PvP element unimportant. UO players were more mixed. DAOC players find the PvP element more important then EQ and UO players. Female players across all three games find the PvP element less important than the male players.



How Important is the PvP element of an MMORPG (UO)



How Important is the PvP element of an MMORPG (DAOC)

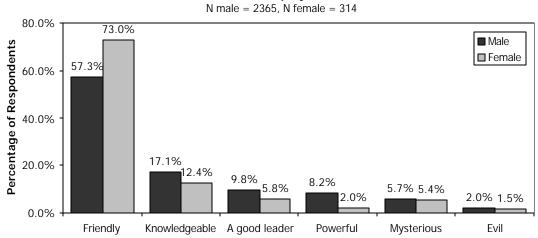
N male = 879, N female = 6080.0% Percentage of Respondents ■ male ■ female 60.0% 40.0% 38.1% 40.0% 32.4% 23.3% 16.0%13.3% 16.7% 20.0% 9.2% 6.7% 4.3% 0.0% Very Somewhat In Between Somewhat Very Important Unimportant Unimportant Important

I would most want other players to think of me as:

Most players want to be thought of as friendly. Female players are significantly more likely to want to be thought of as friendly than male players (p<.001).

I would most want other players to think of me as:							
	EQ Male	EQ Female	UO Male	UO Female	DAOC Male	DAOC Female	
Friendly	58.7%	71.3%	50.8%	70.3%	55.8%	83.3%	
Knowledgeable	17.3%	12.4%	19.6%	21.6%	15.7%	6.7%	
Mysterious	5.4%	5.7%	8.9%	2.7%	5.1%	5.0%	
Evil	1.7%	1.9%	4.9%	0%	1.8%	0%	
Powerful	7.0%	1.9%	12.2%	2.7%	9.8%	1.7%	
A good leader	9.9%	6.7%	3.7%	2.7%	11.8%	3.3%	
N	2363	314	327	37	880	60	

I would most want other players to think of me as:



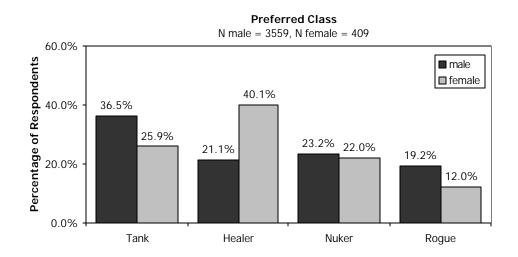
Players who wanted to be thought of as evil or powerful were significantly younger than those who wanted to be thought of as friendly or knowledgeable (p<.001 for all 4).



Preferred Class

Male players were significantly more likely to want to be tanks (p<.001). Female players were significantly more likely to want to be healers (P<.001). Male and female players were equally likely to want to be nukers.

Preferred Class						
	EQ Male	EQ Female	UO Male	UO Female	DAOC Male	DAOC Female
Tank	37.7%	25.0%	32.5%	24.3%	35.0%	31.7%
Healer	21.0%	40.4%	24.8%	43.2%	20.2%	36.7%
Nuker	24.9%	24.0%	15.2%	10.8%	21.4%	18.3%
Rogue	16.5%	10.6%	26.6%	21.6%	23.5%	13.3%
N	2358	312	323	37	878	60



Players who prefer to be healers are significantly older than players who prefer to be the other 3 classes (M_{healer} =27.4, M_{tank} =25.2, M_{nuker} =24.9, M_{rogue} =24.2, p<.001 for all 3). Players who prefer to be rogues are significantly younger than players who prefer to be tanks and healers (p=.04 and p<.001 respectively).

Facets Across Games

Players from the 3 games were compared using the 5 factors extracted in Facets. When players of a game score higher or lower on a certain factor than players from the other 2 games, it can mean that the player base is more motivated by that factor. For example, EQ is the least PvP oriented of the 3 games, so it is not surprising that the EQ player base scores lowest on the Grief factor. But the lower or higher scores can also mean that the game doesn't allow for expressing that factor very well. So the holistic view is that EQ players score lower on the Grief factor because the player base as whole is less Grief-seeking, but this is probably because players who score high on Grief drifted towards other games.

I offer some hunches for the differences below, but with the proviso that these are just hunches.

UO players scored significantly higher on the **Immersion** factor than EQ or DAOC players $(F[2,2237]=9.2,\ p=.001;\ Tukey\ HSD:\ M_{uo}(158)=7.80,\ M_{eq}(1623)=7.55,\ M_{daoc}(459)=7.40,\ p=.03$ and p=.001 respectively). This difference is interesting because both EQ and DAOC use a 3D graphical engine and UO doesn't, so at first it may be kind of surprising that UO players score higher on Immersion. But visual immersion is not the only kind of immersion. UO has a much more intricate and complex game system that goes beyond combat, while EQ and DAOC are weaker in the non-combat department. UO allows player construction and decoration of houses, as well as more fully-fledged mercantile system and esoteric skills (such as Botany). So in the end, the UO world may be more immersive than the EQ or DAOC worlds.

EQ players scored significantly lower on the **Grief** factor than UO or DAOC players (F[2,2237]=11.67, p<.001): Tukey HSD: $M_{eq}(1623)=3.28, M_{uo}(158)=3.62, M_{daoc}(459)=3.45, p=.001$ and p=.02 respectively). As I mentioned before, EQ is the only of the 3 games that wasn't focused on the PvP element. DAOC positioned itself to be about large scale PvP, and non-PvP UO shards were a late-game addition. So EQ probably attracts and retains players who are score lower on the Grief factor.

DAOC players scored significantly lower on the **Relationship** factor than EQ or UO players $(F[2.2237]=25.80, p<.001: Tukey HSD: <math>M_{daoc}(459)=6.52, M_{eq}(1623)=6.90, M_{uo}(158)=6.85,$

p=.001 and p=.02 respectively). One thing that struck me when I started to play DAOC coming from EQ was how much less downtime there was. I remember back in college that I would be able to finish my reading assignments if I read between spawns, and my colleague at work who has played both commented that she used to be able to do housework while playing EQ and not while playing DAOC. But it was during the downtimes that group members would chat, so I wonder whether this lack of free time plays into the ability of friendships to develop.

Another reason is that players who score high on Relationship are less likely to leave a game when a new game comes out because it means they would have to leave behind their friends. So it is the players who score lower on Relationship that that migrate to new games. There is also a gender bias to this. So one hypothesis is that new MMORPG's that come out attract less of the existing female player base, because female players score higher on Relationship. This seems to be true for DAOC.

DAOC players scored significantly higher on the **Achievement** factor than EQ or UO players $(F[2,2237]=26.35,\ p<.001:\ Tukey\ HSD:\ M_{daoc}(459)=7.57,\ M_{eq}(1623)=7.23,\ M_{uo}(158)=7.02,\ p<.001$ for both). Equipment needs upgrades more frequently in DAOC than in EQ, and the con system makes you very aware of evel differences. Levels also make much more difference in DAOC than in EQ. Maybe it's something with these two elements that push the power-leveling effect, because for a while the perception was that you had to be high-level to do RvR, and so everyone was rushing to get to a high level in DAOC. It might also be the ability to one-shot/hit enemy players in DAOC – the massive damage – that influences this. Whereas as any EQ player can tell you, sometimes green mobs can kill you, and the "massive damage feeling" is dampened.

UO players scored significantly lower on the **Leadership** factor then EQ or DAOC players (F[2,2237]=35.19, p<.001): Tukey HSD: $M_{uo}(158)=6.00, M_{eq}(1623)=6.69, M_{daoc}(459)=6.71, p<.001$ for both). I think the large scale plane/dragons raids in EQ and the fort/relic raids in DAOC attract players who like leading a large group, whereas battles never get as complex in UO. The multi-group coordination in large scale raids, and the ability to devise tactics and persuade everyone to actually follow them – all this during lag and LD's, is an impressive feat when executed well.